



State and Federal Policy Options for Wind Power

Troy Gagliano

**National Conference of State
Legislatures**

303.364.7700

troy.gagliano@ncsl.org



Overview

- How wind development involves state lands
- Why states care about wind energy
- Specific RE policies and who's using them
 - State Policies
 - » Renewable Portfolio Standards
 - » System Benefit Funds
 - » Tax incentives
 - Federal Policies
 - » Production Tax Credit, REPI, loan programs



Relevance to State Lands

- Wind resource often best on public lands
- Easier to site projects there
 - farther from population centers, less NIMBY
- State policymakers like revenue associated with wind development
 - Resource on state lands can generate revenue for state government (ex. \$ public schools)
- Wind power has grown nationwide in recent years; expected to expand on to state lands.



Why Wind Power?

- Policymakers are interested wind because:
 - economic development potential,
 - » (property tax & landowner royalties)
 - hedge against natural gas volatility,
 - growing population in western states,
 - generates affordable power (<3-6 cents),
 - can improve/maintain air quality,
 - adds to state's fuel diversity.





Wind and Economic Development: Property Taxes

- Minnesota - Pipestone Co. (6,500 residents)
 - \$517k in '00, \$638k in '01, \$385k in '02
 - \$ goes to schools, townships
- WY-Carbon County
 - \$480,000 in 1999 (~ 30% of total prop. tax)
- Texas - Pecos County
 - ~ \$400,000 annually
 - another \$100,000 for schools statewide



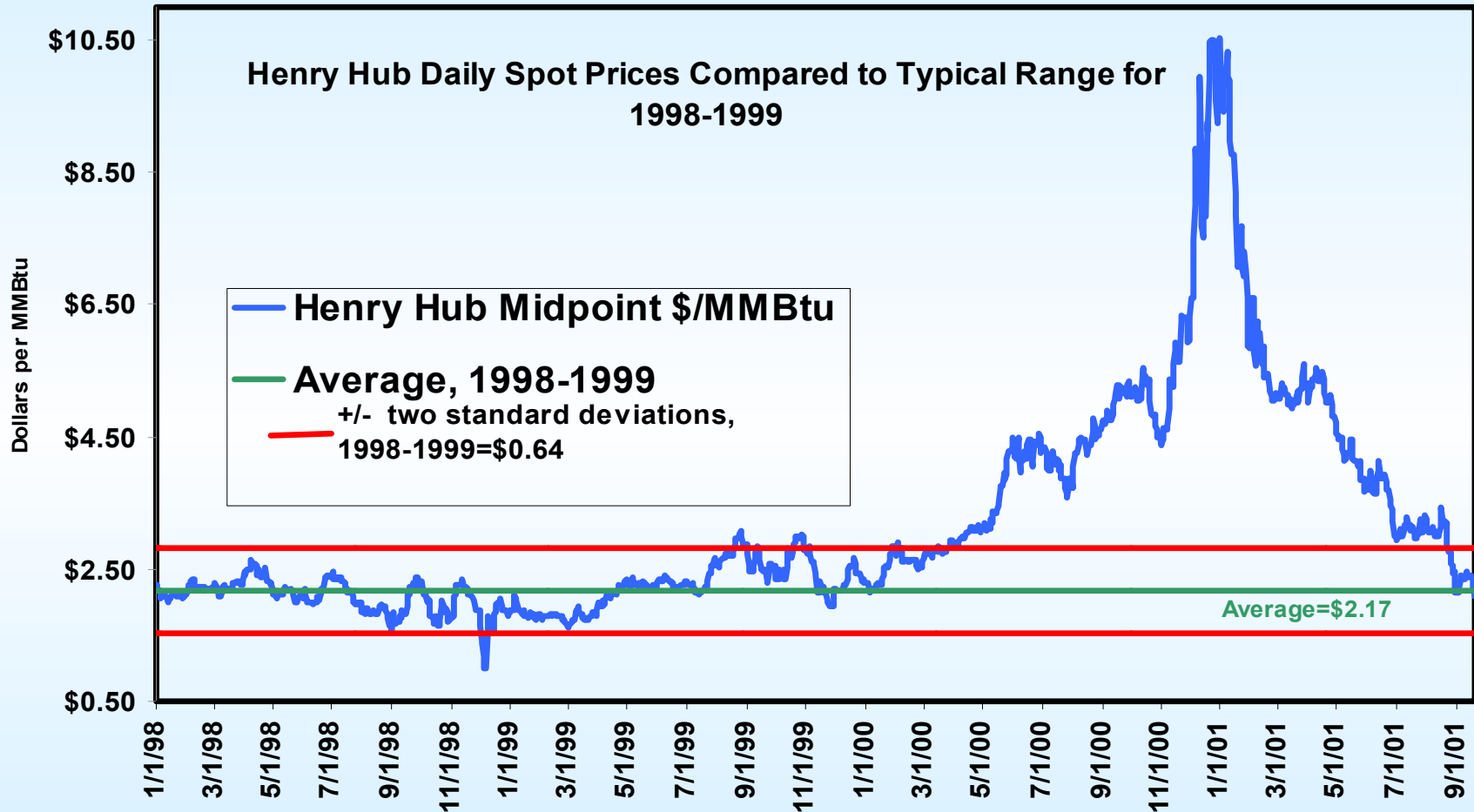


Wind and Economic Development: Landowner Royalties

- Individual landowners lease land to developers
 - nationwide, typically make \$2,000-\$4,000 per year, per turbine
- Revenue depends on electric output of turbines and type of contract



Volatile Natural Gas Spot Prices (Still above \$5.50 as of 4/23/03)



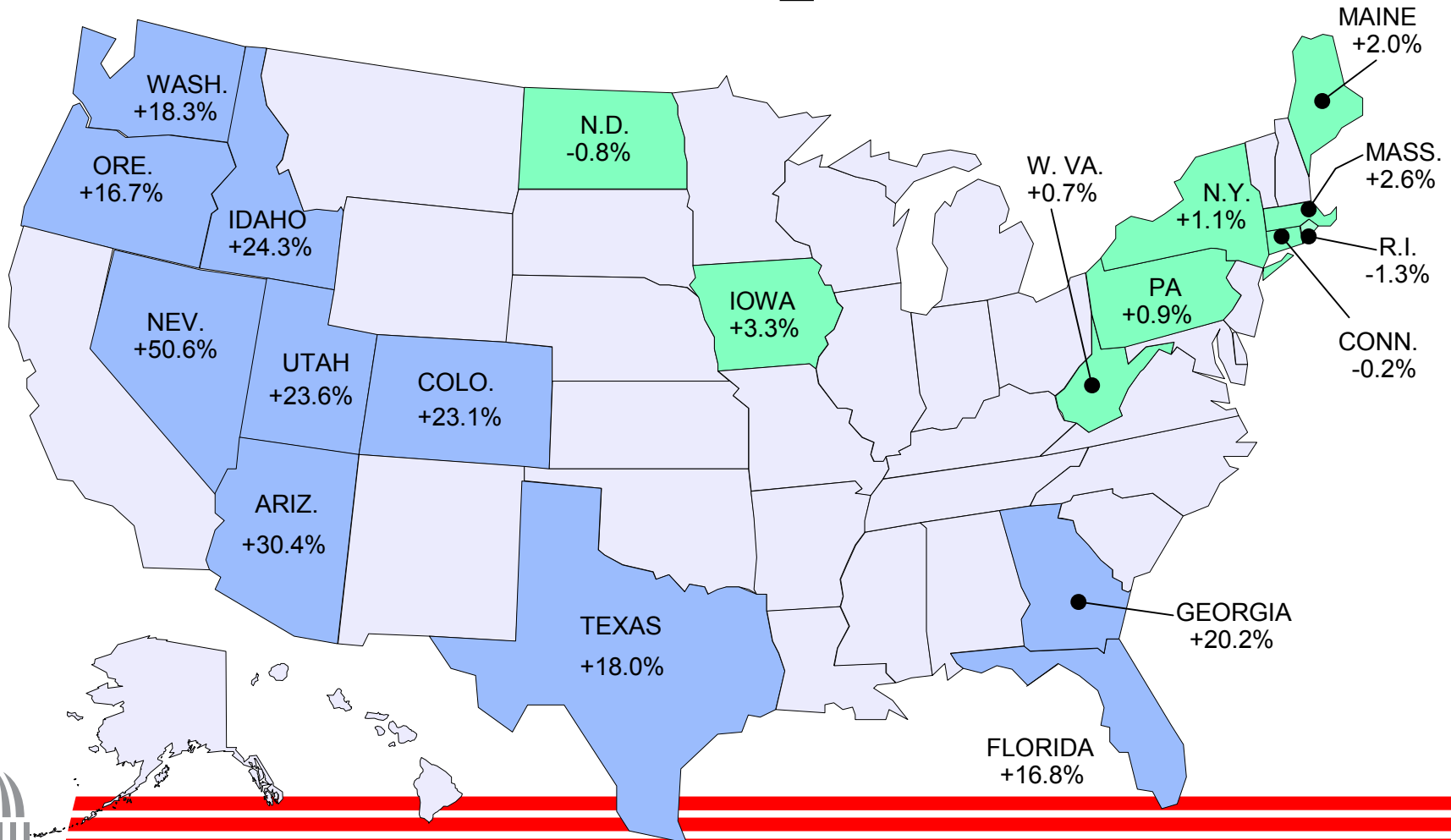
Source: Financial Times Energy, Gas Daily

A Country in Transition

Percentage changes in population from April 1, 1990 through July 1, 1999

Fastest-growing states

Slowest-growing/shrinking states





State Policy Options

- Renewable Portfolio Standard (RPS)
 - supports large-scale wind
 - may raise interest in using state lands
- System Benefit Funds
- Property and Sales Tax Incentives

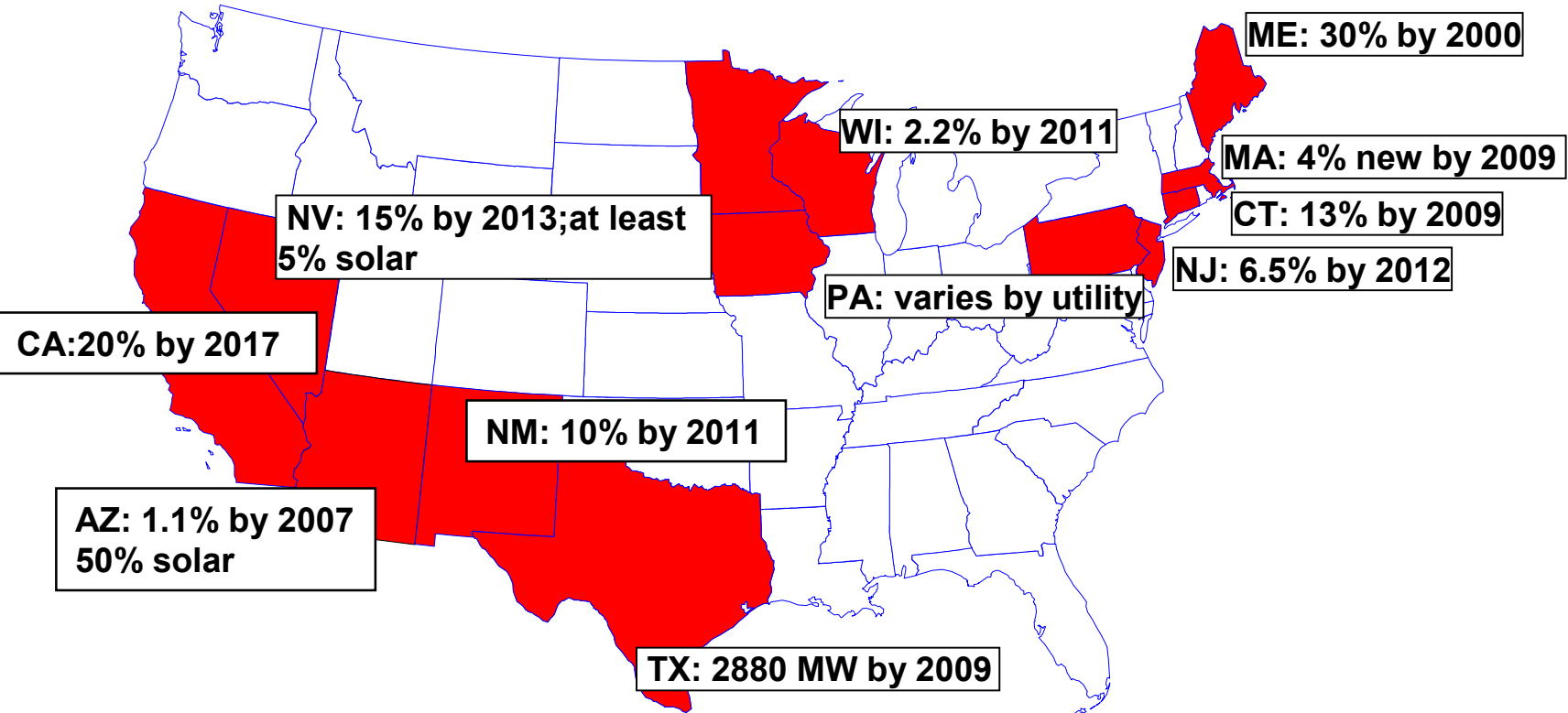


Portfolio Standard Defined

- RPS: Policy that requires electricity retailers in a state to provide a specific amount of total power from renewable energy.
 - RPS met with variety of renewable technologies but mostly wind.
 - Each state RPS is unique.
- States considering RPS in 2003:
 - CO, DE, GA, MD, UT, WA



Renewable Portfolio Standards



The Texas RPS

- RPS is creating large wind farms
 - calls for 2000 new MW by 2009
- TX RPS is effective because:
 - penalties for noncompliance, ease of siting.
 - political support (PUC, Gov. Bush, Legislature)
 - distinct annual goals (exceeding targets)
- Generating electricity at or below 3 cents/kWh
 - with help of federal production tax credit and great wind resource



Cost Impacts of RPS?

- No evidence of significant rate increases in any states with RPS in place.
- Wind resource is a factor.
- TX studies indicate cost of ~ 5 cents per month, per customer.
- Cost to state: minimal (administrative costs)





System Benefit Funds (SBF)

- SBF: fee paid by all electricity consumers (few cents per month) that states use to fund:
 - renewables, efficiency, low-income assistance.
- 15 states: \$3.5 billion by 2012
- Massachusetts: \$ for in-state renewables.
 - Program will generate \$200 M 98-03.
 - \$20 M annually after that.
 - cost to customers: 50 cents/month each bill.



ME: voluntary contributions

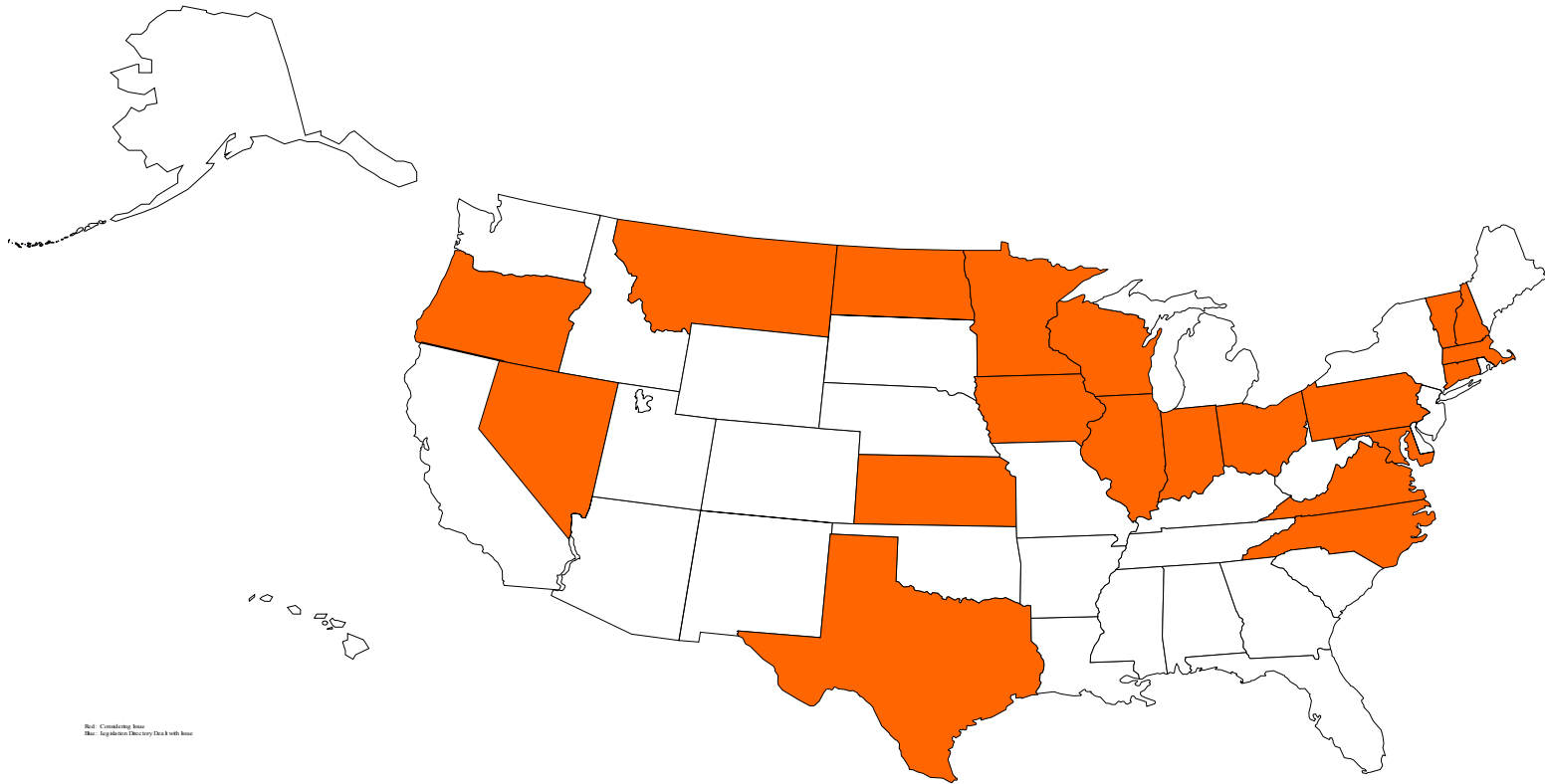


Property Tax Incentives

- Less popular in last two years with budget crises.
- Kansas is one end of the spectrum.
 - 100% property tax exemption for wind developers yields \$0 in property tax
 - developer chooses to pay \$300k/year to county
- Other states use “tiered” tax assessment
 - assess value at 25%, then at 50%, etc.



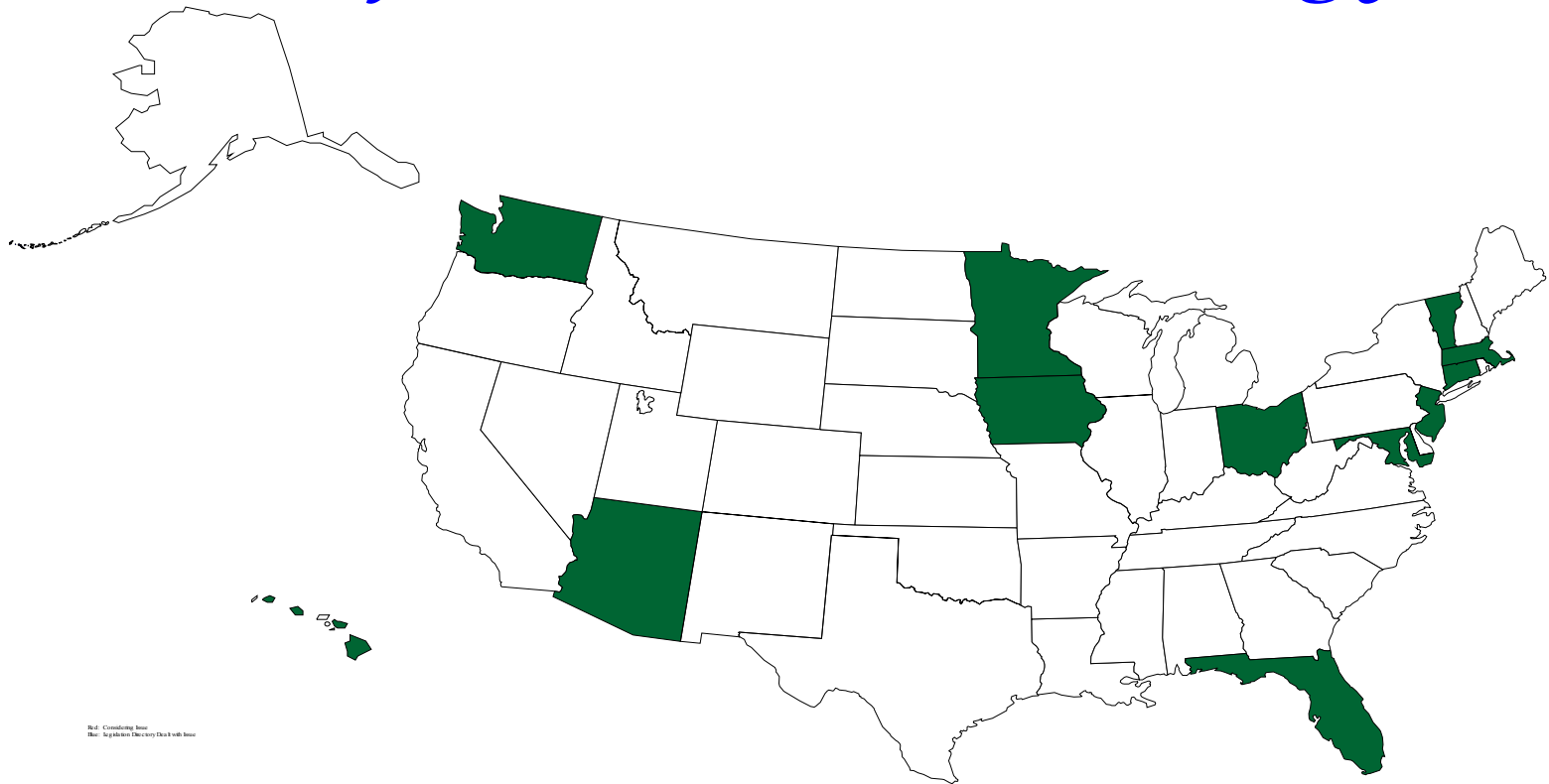
Property Tax Incentives for Renewable Energy



Red: Considering base
Blue: Legislative history check with base



Sales Tax Incentives for Renewable Energy



Federal Policies

- Production Tax Credit (PTC)
- Renewable energy production incentive (REPI)
- USDA Loans
- 2002 Farm Bill



Production Tax Credit (PTC)

- Main incentive driving wind development
 - 1.5 cent kWh production-based incentive for wind and closed-loop biomass
 - adjusted 1.8 cents for 2003
 - get credit for the first 10 years of project
- Re-authorized numerous times but currently expires 12/31/03



What is REPI?

- Incentive for locally-owned, not-for-profit electric utilities to invest in renewables.
- Provides 1.5 cents kWh for electricity produced and sold by new RE facilities.
 - Payments are for 10 years
- ~ \$25 million for renewable projects since 1994
 - 2001: 36 projects = 700 million kWh



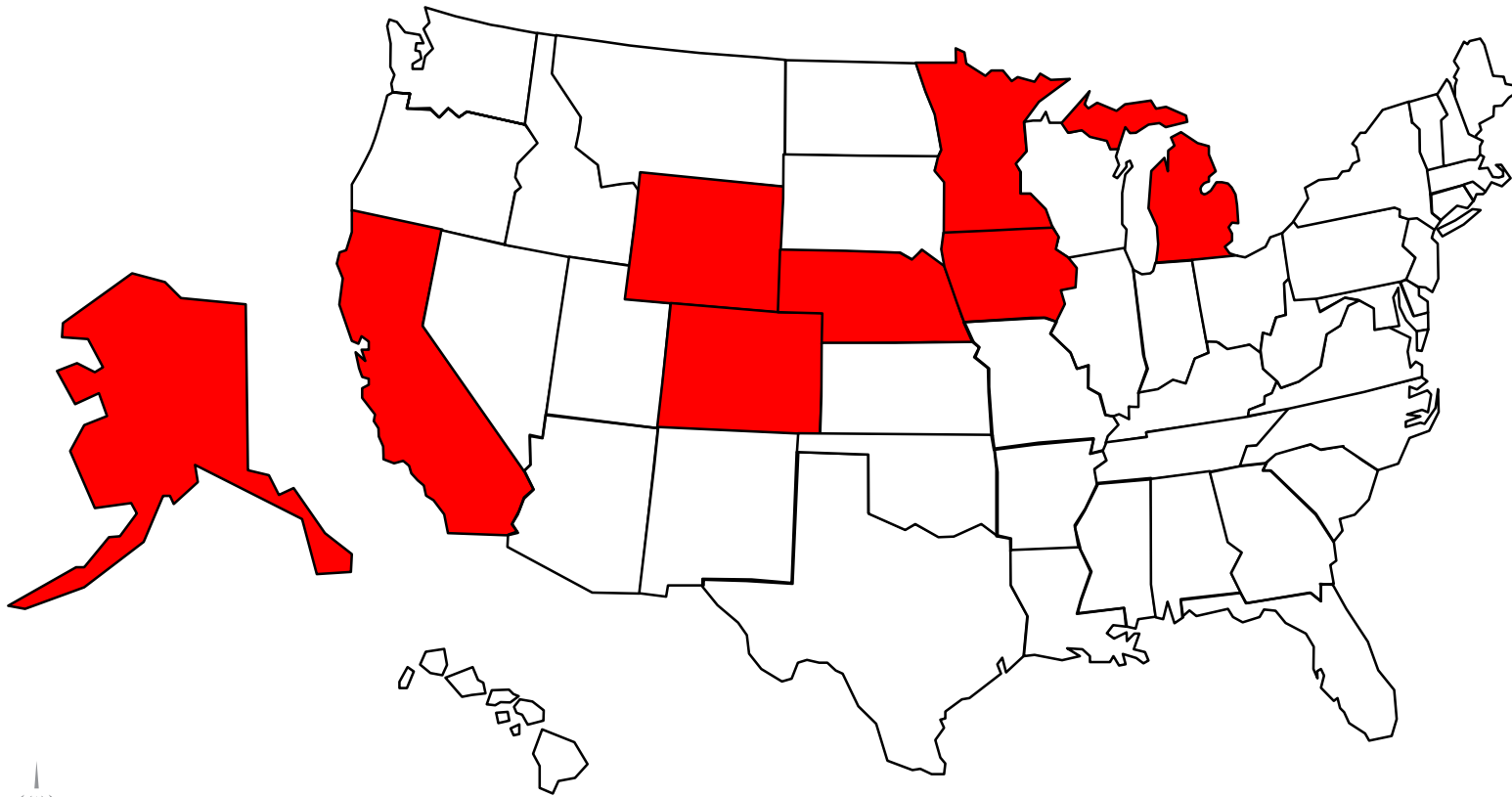
Why REPI?

- ~ 3,000 Pub.Power & RECs = 25% US load.
- Main goal:
 - ensure equity between public power and IOUs
 - » IOUs pay tax and can utilize federal PTC (1.7 cents)
 - » BUT public power is tax exempt and can't tap federal PTC





States Utilizing REPI for Wind (2002 payments)



Challenges Associated w/ REPI

- Annual payments are uncertain & small
 - depend on congressional appropriations
 - limited to \$4 million/year
- Scheduled to end September 2003



USDA RE Generation Loans

- Aimed at rural business, PP Dist., Co-ops
- Loans through two USDA departments
 - Rural Utility Services, Rural Business Services
- Low interest loans ($\sim 5\%$)
 - more \$ than REPI but still subject to approp.
- Project criteria:
 - must serve rural customers; can't sell power to open market



2002 Farm Bill

- Seems best suited for individual farmers/ranchers & small-medium projects.
- Section 6013: amends existing law to make wind eligible for loans and grants (\$25 M each)
- Section 6401: grants to develop feasibility studies, business plans, mktg. strategies
 - max amount is \$500k per project
 - \$240 M total from 2002-2007





Conclusion

Wind has greatly expanded in last 3-5 years;
inevitably will find its way to state lands

States interested in wind power because:

- economic development potential

- protect from volatile natural gas prices

- wind power is cost-competitive

RPS: drives large-scale wind development

- likely will increase interest on using state lands

Federal PTC: main federal policy driver

